**Dr. Reginald L. Hermanns**

**Head of the Landslides group, Geological Survey of Norway**

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**E-mail:** Reginald.Hermanns@ngu.no

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**Citizenship:** German

**Date of birth:** 29.04.1966

**Civil status:** Married, 2 children

**Experience:** 20 years (2015)

**Publications:** 74 papers in reviewed journals or books, 5 books edited, >100 conference proceedings

**Languages:** fluent in English, German, Spanish and Norwegian

**Work experience:**

 6 years head of Landslide Group, 2010-2015 Geological Survey of Norway

4 years project manager "Stability of rockslopes" Excellence Centre: ICG

2 years senior researcher, 2008-2009 Geological Survey of Norway

2 scientific coordinator, 2006-2008 Geological Survey of Canada

2 years senior researcher, 2004-2006 Geological Survey of Canada

3 years researcher, 2001-2004 GFZ Potsdam, Germany

1 year post doc grant, 2000-2001 TU Karlsruhe, Germany

0,5 years post doc position, 1999-2000 University Potsdam, Germany

3,5 years doctor position, 1995-1999 University Potsdam, Germany

1989-1995 total of 33 month student jobs at: University Tübingen, AWI Bremerhaven, AWI MS Polarstern, Umweltmesstechnik Stuttgart, Universidad Autónoma de Mexico

19 month civil service, 1986-1988 St Mary hospital Hamburg, Germany

1 month military service, 1986 Lüneburg, Germany

**Education:** Dr. rer. nat., Mai 1999, magna cum laude University Potsdam, Germany

 Dipl. geol., Mai 1995, 1.3 (grading is 1-5) University Tübingen, Germany

 Diploma studies geology, 1992-1995 University Tübingen, Germany

 3rd yr geology, 2nd yr oceanography, 1991-1992 University of Edinburgh, Scotland

 Vordiploma studies geology, 1988-1991 University Tübingen, Germany

**Awards and lectures:**

2014 Logan lecture, GSC Office in Sidney, BC, Canada

2007 Departmental Merit Award, Natural Resources of Canada

2007 Merit Award, Earth Science Sector, Natural Resources of Canada

**Research interests:**

Research interests focus on rock slope stability that integrates the slope specific conditions with more regional controls as neotectonic, paleoseismology, and Quaternary landscape development and the technical and societal responds to landslide threats. Research topics include:

* Hazard and risk classification of rock slope failures Secondary effects of rock slope failures: displacement waves, landslide dams
* Climate variability and rock slope stability Neotectonics, paleoseismology and rock slope stability
* Rockslide dam longevity and the impact of rock slide dams on landscape development
* Landslide threat within the Andes

**Research tools:**

* Field based structural geology and geomorphology
* Integration of Quaternary geochronology including Terrestrial Cosmogenic Nuclide dating (TCN), luminescence dating, tephrochronology, 14C dating with stratigraphy and sedimentology
* Integration of monitoring data with structural geology and ground based, airborne and satellite remote sensing data

**Administrative experience:**

* Head of the landslide department, NGU, 2010 –
* Project leader of the inter-institutional project "rock slope stability" of the excellence centre: International Centre for Geohazards that included NGU, NGI, NTNU, and NORSAR, 2009 - 2012
* Scientific coordinator of the Multinational Andean Project: Geosciences for Andean Communities that included the geological surveys of Canada, Argentina, Bolivia, Chile, Columbia, Ecuador, Peru and Venezuela, 2006 - 2008
* Project leader of several tens of projects at NGU and GSC, 2004 -
* Secretary of the scientific advisory board of the German Committee for Disaster Reduction, 2001 - 2004
* Coordinator of the graduate program "Natural Disasters" at the TU Karlsruhe, 2000

**Teaching and censoring experience:**

* Fourteen 2-5-day courses on landslides, paleoseismology, quaternary dating techniques, monitoring techniques (dGNSS), airphoto interpretation for professionals in the Andean Countries,
* Guest lectures at multiple universities in Argentina, Canada, Chile, Germany, Switzerland, Norway
* Co-supervised master thesis at NTNU (3); University of British Columbia, Canada (1); University Erlangen, Germany (1); University of Buenos Aires, Argentina (2); University of Concepción, Chile (1)
* Co-supervisor of four PhD thesis at Simon Fraser University (2), Canada; University Erlangen (1), Germany; University of Buenos Aires (1), Argentina
* Opponent on PhD dissertation at ETH Zurich, Switzerland
* Opponent on Master thesis at University in Tromsø, Norway

**Other professional experience:**

* Organiser of conferences, symposia, workshops, and meetings: 3rd Slope Tectonic Conference, Trondheim, Norway, 2014, 4th Symposium on landslides in the Andes, Cordoba, Argentina, 2014, 3rd Symposium on landslides in the Andes, Antofagasta, Chile, 2012; 1st Nordic meeting on TCN dating, Trondheim, Norway, 2012; 2nd Symposium on landslides in the Andes, Cuzco, Peru, 2010; 1st Symposium on landslides in the Andes, Jujuy, Argentina, 2008; 1st, and 2nd Meeting on Active faults in the Andes, Mendoza, Argentina, 2006, and Huaraz, Peru, 2005; NATO Advanced Research Workshop on "Stability of rockslide dams", Bishkek, Kyrgyzstan, 2004; NATO Advanced Research Workshop on "Landslides from massive rock slope failures", Chelano, Italy, 2002; 3rd German Forum of disaster preparedness, Potsdam, Germany, 2002
* Book editor: "Natural and artificial rockslide dams", Lecture Notes in Earth Sciences 2011, Springer, Editor of three books published in the Servicio Nacional de Geología y Minería Chile, Publicación Geológica Multinacional Series No. 4, 7. and 8 in 2007, 2008 and 2009, "Landslides from massive rock slope failures", NATO Science Series, Springer, 2006
* Editor for three conference proceedings and two special issues of the Revista de la Associación Geológica Argentina
* Session convenor at: Nordic winter meeting, Lund, Sweden, 2014, Nordic winter meeting, Reykjavik, Iceland, 2012; Slope Tectonic Conference, Vienna, Austria, 2011; INQUA, Bern, 2011; IGC, Oslo, Norway, 2008 and others
* Reviews for national science foundations: FWF, Austria; DFG, Germany; FONCYT, Argentina; ETH-VPFW, Switzerland; SNSF, Switzerland
* Reviews for: EPSL, Geomorphology, Eng. Geol., Tectonophysics, QSR, NHSS, Landslides, JAES, GSL, NJG, RAGA, Springer books, and multiple conference proceedings

**Other skills:** Driving licence:B, C1, BE, C1E, M, L, hiking, rock climbing, high-altitude mountaineering, sea kayaking, canoeing, cross country and alpine skiing, yoga, jogging

**Selected publications:**

Hermanns, R.L., Fauqué, L., Wilson, C., 2014, 36Cl terrestrial cosmogenic nuclide dating suggest late Pleistocene to early Holocene mass movements on south face of Aconcagua mountain and in the Las Cuevas - Horcones valleys, Central Andes, Argentina. In: Sepulveda et al., (eds): Geodynamic Processes in the Andes of Central Chile and Argentina, Geological Society, London, Special Publication399, http://dx.doi.org/10.1144/SP399.19.

Booth, A.M., Dehls, J., Eiken, T., Fischer, L., Hermanns, R.L., Oppikofer, T. 2014, Integrating diverse geologic and geodetic observations to determine failure mechanisms and deformation rates across a large bedrock landslide complex: the osmundneset landslide, Sogn og Fjordane, Norway. Landslides, DOI 10.1007/s10346-014-0504-y.

Hermanns, R. L., Oppikofer, T., Molina, F. X. Y., Dehls, J. F., and Böhme, M., 2014, Approach for Systematic Rockslide Mapping of Unstable Rock Slopes in Norway, Landslide Science for a Safer Geoenvironment, Springer, p. 129-134.

Hermanns, R. L., Oppikofer, T., Roberts, N. J., and Sandøy, G., 2014, Catalogue of Historical Displacement Waves and Landslide-Triggered Tsunamis in Norway, Engineering Geology for Society and Territory-Volume 4, Springer, p. 63-66.

Hermanns, R. L., Sepúlveda, S. A., Lastras, G., Amblas, D., Canals, M., Azpiroz, M., Bascuñán, I., Calafat, A. M., Duhart, P., and Frigola, J., 2014, Earthquake-Triggered Subaerial Landslides that Caused Large Scale Fjord Sediment Deformation: Combined Subaerial and Submarine Studies of the 2007 Aysén Fjord Event, Chile, Engineering Geology for Society and Territory-Volume 4, Springer, p. 67-70.

Dehls, J. F., Lauknes, T. R., Hermanns, R. L., Bunkholt, H., Grydeland, T., Larsen, Y., Eriksen, H. Ø., and Eiken, T., 2014, Use of Satellite and Ground Based InSAR in Hazard Classification of Unstable Rock Slopes, Landslide Science for a Safer Geoenvironment, Springer, p. 389-392.

Jackson Jr, L., Blais-Stevens, A., Hermanns, R. L., and Jermyn, C., 2014, Late glacial and Holocene sedimentation and investigation of fjord tsunami potential in lower Howe Sound, British Columbia, Engineering Geology for Society and Territory-Volume 4, Springer, p. 59-62.

Roberts, N. J., McKillop, R., Hermanns, R. L., Clague, J. J., and Oppikofer, T., 2014, Preliminary Global Catalogue of Displacement Waves from Subaerial Landslides, Landslide Science for a Safer Geoenvironment, Springer, p. 687-692.

Roberts, N. J., Rabus, B., Hermanns, R. L., Guzmán, M.-A., Clague, J. J., and Minaya, E., 2014, Recent Landslide Activity in La Paz, Bolivia, Landslide Science for a Safer Geoenvironment, Springer, p. 431-437.

Böhme, M., Hermanns, R.L., Oppikofer, T., Fischer, L., Bunkholt, H.S.S., Eiken, T. Pedrazzini, A., Derron, M.-H. Jaboyedoff, M., Blikra, L.H., Nilsen, B., 2013, Analyzing complex rock slope deformation at Stampa, western Norway, by integrating geomorphology, kinematics and numerical modelling. Engineering Geology, v. 154, p. 116-130.

Audin, L., Benavente, C., Machare, J., Audemard, F., Alvarado, A., Tavera, H., Yepes, H., Costa, C., Casa, A., Yamin, M., Fidel, L., Diederix, H., Hermanns, R.L., 2013, Comment to “Open-source archive of active faults for northwest South America” by Gabriel Veloza, Richard Styron, Michael Taylor, and Andres Mora, GSA Today, v. 23, no. 10, p. e24, doi: 10.1130/GSATG169C.1.

Lastras, G., Amblas, D., Calafat, A.M., Canals, M., Frigola, J., Hermanns, R.L., Lafuerza, S., Longva, O., Micallef, A., Sepúlveda, S., Vargas, G., De Batist, M., Van Daele, M., Azpiroz, M., Bascuñán, I., Duhart, P., Iglesias, O., Kempf, P., Rayo, X. Landslide cause tsunami waves: Insights from Aysén fjord, Chile. EOS Transactions of the American Geophysical Union, 4 (34), pp. 297-298.

Hermanns, R.L., Valderrama, P., Fauque, L., Penna, I.M., Sepúlveda, S., Moreiras, S., Zavala Carrión, B., 2012, Landslides in the Andes and the need to communicate on an interandean level on landslide mapping and research, Revista de la Associacíon Geológica Argentina, v. 69 (3), p. 321-327.

Oppikofer, T., Hermanns, R.L., Redfield, T.F., Sepúlveda, S.A., Duhart, P., Bascuñan, I., 2012, Morphologic description of the Punta Cola rock avalanche and associated minor rockslides caused by the 21 April 2007 Aysén earthquake (Patagonia, southern Chile). Revista de la Asociación Geológica Argentina, v. 69(3), p. 339-353.

Penna, I., Hermanns, R.L., Folguera, A. and Niedermann, S., 2011, Multiple slope failures associated with neotectonic activity in the southern central Andes (37º-37º30’S). Patagonia, Argentina. Geological Society of America Bulletin, v. 123, 1880-1895.

Fenton, C.R., Hermanns, R.L., Blikra, L.H., Kubik, P.W., Bryant, C., Niedermann, S., Meixner, A., and Groethals, M.M., 2011, Regional 10Be production rate calibration for the past 12 ka deduced from the radiocarbon-dated Grøtlandsura and Russenes rock avalanches at 69° N, Norway. Quaternary Geochronology. doi: 10.1016/j.quageo.2011.04.005.

Hermanns, R.L. and Niedermann, S., 2011, Late Pleistocene-early Holocene paleoseismicity deduced from lake sediment deformation and coeval landsliding in the Calchaquíes valleys, NW Argentina. In: eds. Audemard, F. und Michetti, A.M. Advances in Paleoseismology, Geological Society of America, Special Paper, v. 479, p. 181–194.

Blais-Stevens, A., Hermanns, R.L., and Jermyn, C., 2011, A 36Cl age determination for Mystery Creek rockavalanche and its implications in the context of hazard assessment, British Columbia, Canada, Landslides, DOI 10.1007/s10346-011-0261-0.

Welkner, D., Eberhardt, E., Hermanns, R.L., 2010. Hazard investigation of the Portillo Rock Avalanche site, central Andes, Chile, using an integrated field mapping and numerical modelling approach. Engineering Geology, v. 114, p. 278-297.

Evans, S.G., Hermanns, R.L., Scarascia Mugnozza, G. und Strom, A., 2011, Natural and artificial rock slide dams, Lecture Notes in Earth Sciences, Springer, Berlin, 642 p.

Proyecto Multinacional Andino: Geosciencias para los Comunidades Andinas, 2009, Atlas de deformaciones cuarternarias de los Andes. Servicio Nacional de Geología y Minería Publicación Geológica Multinacional, No. 7, 311 p, 1CD-ROM.

Proyecto Multinacional Andino: Geosciencias para los Comunidades Andinas, 2008, Experiencias andinas en mitigación de riesgos geológicos. Servicio Nacional de Geología y Minería Publicación Geológica Multinacional, No. 6, 107 p.

Proyecto Multinacional Andino: Geosciencias para los Comunidades Andinas, 2007, Movimientos en Masa en la Región Andina: Una guía para la Evaluación de Amenaza. Servicio Nacional de Geología y Minería Publicación Geológica Multinacional, No. 4, 404 p, 1CD-ROM.

Evans, S.G., Strom, A., and Scarascia-Mugnozza, G., Hermanns, R.L., 2006, Landslides from massive rock slope failures, NATO Series Publication, Springer, Berlin, 662 p